SEPTEMBER 15, 2004
AIR QUALITY BULLETIN – MPOs
ACTION NEEDED
CARB'S REFUSE RULE:
SEIZE THE OPPORTUNITY TO REDUCE NOx AND PM EMISSIONS

Issue

- CARB's Refuse Truck Rule[1] became effective as of July 20, 2004. It impacts over 12,000 refuse trucks that operate daily throughout California, primarily on residential streets.
- ***If refuse haulers only meet the minimum compliance requirements, there will be no NOx reductions from retrofitting existing in-service vehicles as a result of this Rule.***
- ***This would be a huge opportunity missed to reduce the NOx-related health impacts on all Californians. Also, many regions need NOx reductions to meet transportation conformity requirements.***
- ***If both PM and NOx reductions were required, over 3.18 tons per day of NOx reductions, equal to nearly 10% of NOx from refuse trucks, could be achieved statewide.***
- ***Moreover, this reduction can be achieved at a very modest, one-time cost.***

Background

- The health impacts of particulate pollution and ozone (which includes NOx) are serious. Children, the elderly and those with respiratory problems are especially susceptible to the dangers of air pollution. These impacts are especially acute in low-income and minority neighborhoods and near freeways and major arterials.
- On average, each refuse truck emits 1.11 tons of nitrogen oxides (NOx) and .07 tons of particulate matter (PM) each year. Statewide, refuse trucks emit 13,320 tons of NOx and 840 tons of PM each year. That is over 39.49 tons per day of NOx and 2.3 tons per day of PM.
- We need to reduce PM and NOx emissions throughout the State in order to attain the Federal health-based air quality standards.
- The Refuse Rule requires PM reductions, but does not require NOx reductions, even though ARB-verified technologies exist to achieve cost effective NOx and PM reductions.
- If the Rule were also to require NOx reductions, over three tons per day, or 1,160 tons per year, in NOx reductions could be achieved:

Region	Possible NOx Reductions	
	Tons per Day	Tons Per year
Bay Area Air Quality Management District	0.61	223.0
South Coast Air Quality Management District	1.53	558.5
San Diego Air Pollution Control District	0.27	98.6
San Joaquin Air Pollution Control District	0.27	98.6
Monterey	0.06	21.9
Sacramento Metropolitan Air Quality Management District	0.18	65.7
Other areas in California	0.26	94.9
Total Possible Daily NOx Reductions	**3.18 Tons Per Day**	**1,161.2 Tons per Year**

[1] Article 4, Diesel Particulate Matter Control Measures, Chapter 1, Division 3, Title 13, California code of Regulations, Sections 2020, 2021, 2021.1, 2021.2.

Costs of Compliance are Minimal and One-Time Only

- CARB recognizes in the rule and has notified cities and counties[2], that the cost of compliance should be passed on to ratepayers and negotiated into refuse hauling contracts. Over 87% of the existing refuse contracts allow for renegotiation in the case of a new State law such as this.

- Where cities and counties directly provide waste hauling, they need to comply with the Rule. It is expected that they will also pass the cost of compliance on to residential and commercial customers.

- The costs[3] of rule compliance are shown below. This table assumes the entire cost is spread out over a one-year period. Assuming the monthly refuse service cost is currently $18.90 per household, the one-time cost increase would be 1.5% for PM only and 2.8% for PM and NOx reductions.

Cost	Monthly One Time Cost per Household	Total One Time Cost per Household
PM only control	$.28	$3.36
PM and NOx control	$.53	$6.36
Incremental difference PM only vs. PM and NOx	**$.25**	**$3.00**

Why Does This Matter to Metropolitan Planning Organizations (MPOs)?

- U.S. EPA requires that federal transportation investments support clean air goals.

- MPOs must demonstrate that transportation sources including trucks, cars, and buses are achieving emissions reductions from PM, NOx and VOCs. This is called transportation conformity. Refuse trucks need to reduce NOx to help in this process.

- **Failure to meet U.S. EPA transportation conformity requirements results in the withholding of federal transportation funds for all but limited types of projects. An interruption in the flow of federal transportation funds impacts everyone and delays needed investments: cities, counties, transit agencies, and metropolitan planning organizations are all impacted.**

What Can Metropolitan Planning Organizations Do? Be Proactive….

- Immediately inform all cities and counties within the MPO region of the need to reduce NOx and PM emissions.

- Insist that cities and counties require the highest level of reductions of both NOx and PM reductions from refuse trucks.

- Explain that MPOs need both NOx and PM reductions to meet transportation conformity requirements. ***If the region cannot meet transportation conformity requirements, the entire region will suffer the consequences, which include delays in project funding.***

- Support the Cities and Counties efforts to renegotiate refuse contracts to offset the cost of compliance. The per household incremental cost difference is 53 cents per month for one year only to get maximum reductions of NOx and PM.

The benefits to air quality and public health are well worth the effort!!

[2] CARB Board Members DeSaulnier, Patrick, Riordan, Roberts letter to all City and County Officials, April 30, 2004.

[3] All compliance costs are estimates using reasonable assumptions and are intended to offer an understanding of the magnitude and scope of compliance costs. Actual compliance costs must be considered on an individual fleet basis and will likely be different.